

What is claimed is:

1. A method comprising

transferring an authenticated code module to a private memory; and

executing the authenticated code module stored in the private memory in

5 response to determining that the authenticated code module stored in the private memory is authentic.

2. The method of claim 1 further wherein transferring comprises transferring a number of bytes specified by an operand from a memory.

3. The method of claim 1 further comprising

configuring a cache memory of the processor to operate like a random access memory,

wherein transferring comprises storing the authenticated code module in the cache memory.

4. The method of claim 3 further comprising invalidating the cache memory prior to storing the authenticated code module in the cache memory.

5. The method of claim 3 further comprising locking the cache memory to prevent lines of authenticated code module from being replaced.

6. The method of claim 1 further comprising determining whether the authenticated code is authentic based upon a digital signature of the authenticated code module.

7. The method of claim 1 further comprising

5 obtaining a first value from the authenticated code module stored in the private memory;

computing a second value from the authenticated code module; and

determining that the authenticated code module is authentic in response to the first value and the second value having a predetermined relationship.

10 8. The method of claim 1 further comprising

retrieving a key,

decrypting a digital signature of the authenticated code module with the key to obtain a first value,

hashing the authenticated code module to obtain a second value; and

15 executing the authenticated code module in response to the first value and the second value having a predetermined relationship.

9. The method of claim 8 wherein

20 decrypting comprises using the key to RSA-decrypt the digital signature, and

hashing comprises apply a SHA-1 hash to the authenticated code module to obtain the second value.

10. The method of claim 8 further comprising retrieving the key from the processor.

11. The method of claim 8 further comprising retrieving the key from a chipset.

5 12. The method of claim 8 further comprising retrieving the key from a token.

13. The method of claim 1 wherein transferring comprises receiving the authenticated code module from a machine readable medium.

10 14. A computing device, comprising

a chipset;

a memory coupled to the chipset;

a machine readable medium interface to receive an authenticated code module from a machine readable medium;

a private memory coupled to the chipset; and

a processor to transfer the authenticated code module from the machine readable medium interface to the private memory and to authenticate the authenticated code module stored in the private memory.

20 15. The computing device of claim 14, wherein the chipset comprises a memory controller coupled to the memory and a separate private memory controller coupled to the private memory.

16. The computing device of claim 14, wherein

the chipset comprises a key, and

the processor authenticates the authenticated code module stored in the private memory based upon the key of the chipset.

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17. The computing device of claim 14, wherein

the processor comprises a key and authenticates the authenticated code module stored in the private memory based upon the key of the processor.

18. The computing device of claim 14, further comprising

a token coupled to the chipset, the token comprising a key, wherein

the processor authenticates the authenticated code module stored in the private memory based upon the key of the token.

19. A computing device, comprising

a chipset;

a machine readable medium interface to receive an authenticated code module from a machine readable medium; and

a processor coupled to the chipset via a processor bus, the processor to transfer

the authenticated code module from the machine readable medium interface to a private memory of the processor and to authenticate the authenticated code module stored in the private memory.

20. The computing device of claim 19, wherein the private memory is coupled to the processor via a dedicated bus.

21. The computing device of claim 19, wherein the private memory is internal to the processor.

22. The computing device of claim 19, wherein the private memory comprises internal cache memory of the processor.

23. The computing device of claim 19, further comprises
other processors coupled to the chipset via the processor bus, wherein
the processor further locks the processor bus to prevent the other processors
from altering the authenticated code module.

24. A computing device, comprising
a memory;
a chipset comprising a memory control that defines a portion of the memory as
private memory;
a machine readable medium to receive an authenticated code module from a
machine readable medium; and
a processor to transfer the authenticated code module from the machine
readable medium interface to the private memory and to authenticate the authenticated
code module stored in the private memory.

25. The computing device of claim 24, wherein the chipset comprises a memory controller coupled to the memory and a separate private memory controller coupled to the private memory.

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26. The computing device of claim 24, wherein
the chipset comprises a key, and
the processor authenticates the authenticated code module stored in the private memory based upon the key of the chipset.

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27. The computing device of claim 24, wherein
the processor comprises a key and authenticates the authenticated code module stored in the private memory based upon the key of the processor.

28. The computing device of claim 24, further comprising
a token comprising a key, wherein
the processor authenticates the authenticated code module stored in the private memory based upon the key of the token.

29. A machine readable medium comprising one or more instructions that in response to being executed result in a computing device
transferring an authenticated code module to a private memory associated with a processor; and

executing the authenticated code module stored in the private memory in response to determining that the authenticated code module stored in the private memory is authentic.

- 5 30. The machine readable medium of claim 29, wherein the one or more instructions in response to being executed result in the computing device

determining whether the authenticated code is authentic based upon a digital signature of the authenticated code module.

- 10 31. The machine readable medium of claim 29, wherein the one or more instructions in response to being executed result in the computing device

obtaining a first value from the authenticated code module stored in the private memory;

computing a second value from the authenticated code module; and

15 determining that the authenticated code module is authentic in response to the first value and the second value having a predetermined relationship.

32. The machine readable medium of claim 29, wherein the one or more instructions in response to being executed result in the computing device

20 retrieving an asymmetric key;

decrypting a digital signature of the authenticated code module with the asymmetric key to obtain a first value;

hashing the authenticated code module to obtain a second value; and

initiating execution of the authenticated code module in response to the first value and the second value having a predetermined relationship.

33. The machine readable medium of claim 29, wherein the one or more instructions
5 comprises a launch instruction that in response to being executed results in the computing device

retrieving an asymmetric key;

decrypting a digital signature of the authenticated code module with the asymmetric key to obtain a first value;

10 hashing the authenticated code module to obtain a second value; and

initiating execution of the authenticated code module in response to the first value and the second value having a predetermined relationship.

34. The machine readable medium of claim 33, wherein the one or more instructions in
15 response to being executed result in the computing device

receiving the authenticated code module via a machine readable medium interface.